



THE PIANC NEWSLETTER

Permanent International Association of Navigation Congresses

Spring 1997

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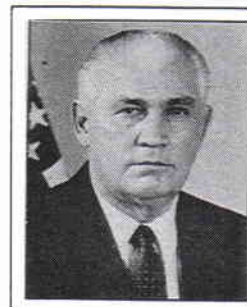
NOTES FROM THE SECRETARY

The U.S. Section is very pleased to learn that the recipient of the 1997 Gustave Willems Prize is **Ms. Jennifer L. Irish**, Hydraulic Engineer with the Coastal Structures and Evaluation Branch of the U.S. Army Engineer Waterways Experiment Station. The title of her paper, which will be published in the July issue of the PIANC Bulletin, is *Sensitivity of Channel Sedimentation Prediction to Wave-field Characterization*. **Ms. Irish** will receive a cash prize, a five-year membership in PIANC and an expense paid trip to Venice, Italy, where she will present her paper before an international forum. Since the initial presentation of the Willems Prize in 1985, **Ms. Irish** is the fourth member of the U.S. Section to receive it. Congratulations!

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A TRIBUTE TO BILL MURDEN

William R. Murden
August 19, 1922 - March 15, 1997



William R. Murden

Many of us were saddened to learn that William (Bill) R. Murden died on March 15, 1997. His death signaled the end of an era. For several decades, the name Bill Murden had rung a familiar, authoritative bell for anyone affiliated with the dredging industry.

As Bill Murden rose to become the undisputed "godfather" of the U.S. Army Corps of Engineers' ever growing dredging program, his skills were recognized not only by the Corps, but by the industry and his peers. In 1979, he was elected to the National Academy of Engineering, a rare national honor. Just prior to his retirement in December 1987, he was awarded the renowned Presidential Award for Meritorious Service in recognition and appreciation of his numerous achievements during 44 years of federal service! More recently, he became a Fellow of the Society of American Military Engineers.

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The competition for the **1998 Gustave Willems Award** is now open. The international award is given for the most outstanding technical paper prepared on design, construction, improvement, maintenance, or operation of inland and maritime waterways and is open to anyone 35 years or younger. If you do not plan to enter the competition, please give the enclosed announcement to someone who may be interested in it.

On March 15, 1997, the Permanent International Association of Navigation Congresses lost a devoted and longtime member of the association and a friend to many, when **Mr. William R. Murden** passed away. An article about Mr. Murden's career will be published in the next issue of the international bulletin. A related article appears in this issue of the newsletter.

Within recent weeks, the **Permanent Technical Committees I and II, (PTC I, and PTC II)** the **Permanent Environmental Commission (PEC)** and the **Joint Commission for Sport and Pleasure Navigation (SPN)** as well as the **Executive Committee of the Permanent International Commission** have held meetings. Reports provided by the Principal Representatives of the U.S. Section of PIANC and by the Acting Vice President for the United States are summarized in the following paragraphs.

■ **Mr. Richard Dornhelm** attended the meeting of the SPN on February 27, 1997, in Brussels. Items of business discussed at the meeting included:

Two recent publications on SPN subjects are being very well received. The reports are: *Guidance on Marine Sanitation Pumpouts* (**Mr. Edward McKiernan** of SeaLand Technology, Inc., the U.S. Section Representative, served as Chairman of the Working Group) and *Review of Selected Standards for Floating Dock Designs*, which was co-authored by **Mr. Jack Nichol** (a Consulting Engineer who also serves as the Co-Principal U.S. Repre-

sentative to the SPN) and **Mr. Ian White** of British Waterways, United Kingdom.

Eleven national papers have been received for the session on vessel traffic conflicts at the 29th International Congress.

Concerning other working groups: *Regeneration of Harbor Areas* is proceeding nicely with analysis of individual harbor examples. The next meeting of the group will be in Seattle in the Spring. Publication is expected in 1998. The U.S. does not have a representative on *Provision of Low-Cost Moorings*; however, the Section could still consider nominating a member if an expression of interest is received. A new working group on sport and pleasure navigation and natural resource protection was discussed. The SPN and PEC are reviewing the proposed terms of reference which will be considered at the September meeting.

A study of the special dredging needs of small craft harbors was discussed. The subject will be coordinated with the PEC.

Mr. Ron Stone made a presentation on planning for the third International Marina Conference which will be held in Ft. Lauderdale, Florida, on February 15-17, 1999.

■ **Mr. Anson Eickhorst** attended the meeting of PTC I on February 28, 1997, in Brussels. Some of the chief issues discussed included:

Part I of Working Group 17, *Handling and Treatment of Contaminated Dredged Material from Inland Ports and Waterways*, has been published in five languages (English, French, German, Italian and Spanish). Part II will be published on a CD-ROM in English.

The report of Working Group 20, *Standardization of Dimensions of Navigation Channels*, will be published in June 1997.

A new working group: *Ice Breaking Techniques and How to Evaluate from an Economic Perspective* was accepted by PTC I.

Other topics for working groups that were discussed included: techniques for erosion control, water quality and habitat restoration;

hydrographic surveying and dredging techniques; and lock automation and remote control.

In the future only one or two new working group proposals per year will be accepted. This policy will require a much more selective screening process than has been employed in the past.

PTC I will present one of the working group reports, to be published around the time of the 29th International Congress, as its discussion topic at the Congress.

■ **Mr. Charles Connors** attended the meeting of **PTC II** on February 28, 1997, in Brussels. Here are some highlights of the lengthy minutes of the meeting:

Final reports were received from Working Group Number 18, *Planning of Fishing Ports*, which will be published in September 1997, and Working Group Number 30, *Dimensions of Channels and Fairways*, which will be published in January 1998. The report of Working Group Number 22, *Armoured Slopes Under Open Piled Quaywalls* will be published in July 1998.

The problem of the amount of time that elapses between the time a working group presents its final report and publication was discussed. A suggestion was made to look for sponsors outside PIANC to support publication of technical reports.

It was decided that the subject of ice and polar navigation, which was proposed by **Mr. Orson Smith** of the U.S. Section, will be organized as a fact-finding group. The group would identify state-of-the-art information and research in progress and determine the roles of the PTC II and PEC in a single working group on the subject.

■ **Mr. Harry Cook**, who is filling out the remaining months of **LTG Henry Hatch's** term as an International Vice President representing the United States, attended the **Executive Committee** meeting on March 25, 1997,

in Brussels. His meeting report notes discussion of the following matters:

Mr. De Paepe called for a minute of silence in honor of **Mr. Murden**.

There are now two vacant Vice President positions. A four-year term created by the expiration of LTG Hatch's term and a three-year term created by the resignation of Mr. Krause, the representative of Germany who was elected in May 1996. Consideration is being given to candidates from Scandinavian countries and Italy.

A revised draft of the *Statutes*, which presents 15 articles in a simpler, clearer style than the previous edition, has been distributed for review. Final approval of the draft is anticipated at the 29th International Congress in September 1998.

The Spanish Section is conducting a membership drive in South America by sending 300 written solicitation letters and copies of a working group report on beneficial uses of dredged material. **Mr. Cook** presented suggestions on membership retention and recruitment and a list of suggestions for augmenting membership dues with non-dues income. He proposed that the secretaries of national sections be requested to submit the two or three most successful membership-drive formulas and that these be compiled into a paper and distributed to all national sections. Concerning non-dues income, he distributed a paper listing some 200 methods employed by U.S. Associations to generate non-dues income.

The Chairman of the Dutch Section reported on plans for the 29th International Congress and displayed the proposed logo for the meeting. The logo is an outline of The Netherlands in the center with wording in a circle around the outside perimeter reading *Navigation Congress, Den Haag*. It was suggested that *PIANC* should be added to the wording. The list of names of the Chairmen and Reporters-General for the 10 sessions of the Congress was distributed. There was discussion of the need for a declaration by the

President to be issued prior to the next Congress on the general theme of *The Role of Inland and Maritime Navigation in the Transport Chain*.

Several optional financial arrangements were presented for publication of the first part of the *technical dictionary*.

The next edition of the membership directory will include e-mail addresses. National Sections will request that members provide up-dated information.

In the fall, PIANC offices in Brussels will move into a building, which is now in the final phase of construction, located about a block from the present office.

■ **Dr. Robert Engler** attended the meeting of the PEC March 17-19, 1997, in Huelva, Spain. The four PEC working groups: *Management of Aquatic Disposal*, *Wildlife Habitat and Port Management* and *Environmental Management for Ports* are all scheduled to be published in 1998. The *Glossary of Environmental Terms* will be distributed electronically in 1997.

The Public Relations Group is drafting an action plan in conjunction with CEDA and IADA. The Group is also preparing a brochure entitled, *Dredging and Disposal - The Facts*, and guidance on use of the brochure.

Consideration was given to several topics for new working groups: justification by ports and inland waterways on the environment, environmental issues related to polar navigation, pleasure navigation and natural resource protection and environmental aspects of aquatic, nearshore, and upland confined disposal facilities for contaminated dredged material.

The *Dredged Material Management Guide*, which will present a preferred approach to manage dredged material in any disposal scenario and act as an umbrella document for all PIANC reports dealing with dredged material, will be issued in 1997. The 1996 Protocol of the London Convention was discussed. For additional information, see the

article elsewhere in this issue of the newsletter.

■ The Southern Governors' Association Task Force on Transportation has issued a report entitled, *Promoting Economic Growth and Development into the Next Century*. **Mr. Donald Waldon**, Administrator, Tennessee-Tombigee Waterway Development authority and U.S. Section Commissioner Representing the Central Region, served as a member of the Task Force on Transportation that prepared the report.

BILL MURDEN

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But Bill's life wasn't all about dredging. He was much beloved as a caring and compassionate human being, and he was greatly admired by his colleagues and co-workers. That is what really made him truly successful.

Bill Murden's devotion to his work was only matched by his devotion to his wife, Dottie. Dottie was Bill's best friend, his partner and mentor in life, in work and in play for almost 50 years. She was as familiar with his projects, his problems, and his successes as any of his fellow workers. They worked and traveled together, forging a perfect team that many would have liked to imitate. In talking to Bill Murden, you knew that invariably he would mention Dottie's name.

In the same way, most people in the dredging business would find it difficult to discuss dredging and not mention Bill Murden's name. The son of a Corps dredge captain, he learned at an early age to identify equally well with the captains who made the decisions on the water and the mechanics who kept the dredges running. Born on August 19, 1922, in Beaufort, North Carolina, Bill served as a bomber command pilot in the U.S. Army Air Corps during World War II. After working as an engineer with the Norfolk District of the Corps of Engineers in the hydro-electric and dredging divisions, Bill joined the Corps Headquarters in Washington, D.C., in 1956, where he served for 30 years. Along the way,

he found time to complete his degree in Mechanical Engineering from Elizabethtown College in Pennsylvania and later, a Master of Business Administration from Heed University.

In the 1960s, Bill was heavily involved in the maintenance of the Panama Canal, particularly dredging during emergency situations. He was also in charge of U.S. dredging operations in Vietnam during the conflict. He demonstrated such exceptional leadership, intelligence, tact and imagination that in 1979, the Chief of Engineers, LTG John Morris, appointed him Chief of the Dredging Division of the U.S. Army Corps of Engineers, a component of the Directorate of Civil Works. As Dredging Chief and a member of the Senior Executive Service, Bill was responsible for the entire dredging program of the U.S. Army Corps of Engineers, to include the planning, budgeting, design and construction of Corps dredges and other major floating and land plant operated in conjunction with the Civil Works program.

No biography about Bill Murden would be complete without mentioning his role in establishing working relationships related to dredging and the use of dredged material with the Dutch, French, and Japanese governments. Dottie was especially helpful as Bill worked tirelessly to bring together dredging experts to discuss proven and innovative concepts. As a result, each country has benefited from shared dredging technology and techniques and will continue to do so in the future.

Convinced that there were significant, untapped benefits to using dredged material, Bill encouraged and supported this concept not only in the Corps, but with PIANC, the National Research Council, the American Society of Mechanical Engineers, the National Waterways Association, and the Western and Eastern Dredging Associations as well as throughout the world. He lived to see beneficial uses of dredged material, such as wildlife nesting islands, beach nourishment, wetlands

restoration, and shoreline protection, become routine practices.

In PIANC, Bill saw the key to shared technology with the world. Over the years, he remained very active in PIANC, serving as Chairman of the Finance Committee and putting PIANC on a firm financial footing, planning national conferences, and becoming a Commissioner Emeritus and an Honorary International Member in 1990.

After he retired from government service, Bill became the president of Murden Marine, Ltd., a successful marine engineering consulting firm he founded and operated with Dottie. As a private citizen, he continued to stay involved in dredged material workshops until his death.

Once Bill Murden made a friend, the relationship lasted a lifetime. His old friend from The Netherlands, Augie Hoekstra, came a long way to say good-bye to Bill, as did three retired U.S. generals— LTG John Morris and LTG E.R. Heiberg III, both former Chiefs of Engineers, and LTG John Wall, former Director of Civil Works, now Father Wall and the Episcopal priest who conducted the funeral service. Also present were Robert Dawson, former Assistant Secretary of the Army for Civil Works, and Morgan Rees, former Deputy Assistant Secretary of the Army. Amid a sea of colleagues, family and flowers, they paid tribute to this amazing man they all called "friend."

Bill Murden is survived by his beloved wife, Dorothy (Dottie) Gibson Murden.

CHIEF OF ENGINEERS REPORTS ON DIVISION RESTRUCTURING

Corps of Engineers Chief, Lieutenant General Joe Ballard, called Corps headquarters employees together several weeks ago for a second Town Hall meeting. It was held, as he promised, at the six-month mark of his service as Chief of Engineers.

The Chief announced the "end state" envisioned for Division Restructuring within the Corps of Engineers. "The new structure of the Corps will ensure continued customer service," said LTG Ballard. "It also ensures that the management of the major watershed basins stays under a single division headquarters."

The final map of the Corps will show eight divisions: North Atlantic, South Atlantic, Great Lakes and Ohio River, Mississippi Valley, Southwest, Northwest, South Pacific, Pacific Ocean. Each division will be commanded by a General officer and will include at least four districts. (See page 19 for map)

The major components of the new structure involve realigning the staffs of four current division offices into two divisions, each under the control of a single commander. The headquarters of the North Central and Ohio River Divisions are combined to form the new Great Lakes and Ohio River Division, with headquarters located in Chicago and Cincinnati. The North Pacific and Missouri River Divisions are combined to form the new Northwestern Division, with headquarters located in Portland and Omaha. A headquarters office is at all four locations to better coordinate and address regional issues.

Additionally, the New England Division is converted to the New England District and will report to the North Atlantic Division Commander in New York City.

A number of districts will report to different offices. St. Paul and Rock Island Districts now report to the new Mississippi Valley Division. Alaska District now reports to the Pacific Ocean Division, based in Honolulu. The Albuquerque District now reports to the South Pacific Division in San Francisco.

The restructuring is in response to Public Law 104-206, Energy and Water Development Appropriations Act, 1997, which directs the Corps of Engineers to reduce the number of its divisions.

"The new structure does more than just meet the requirement to reduce the number of divisions," said LTG Ballard. "It optimizes support to military forces, minimizes district realignments and maintains geographical balance."

The restructuring will not include any changes to Military Programs at the districts.

For now, no further changes are contemplated.

"I am going to place a hold on all restructuring efforts for one year," LTG Ballard said. "You have been reorganizing and planning for too long. We need to pause, catch our breath, and absorb what has happened before we make more big changes. It's time to stop shuffling the decks long enough to know where we are going."

1996 PROTOCOL REPLACES LONDON CONVENTION

The London Convention meets two to three times a year and agrees on criteria, standards, prohibitions, allowances, and management protocols. These protocols form the minimum requirements for U.S. domestic regulations for the disposal of dredged material and other allowed materials into marine waters.

There are 72 nations signatory to the London Convention. Decisions reached at London Convention (Consultative, Scientific

Group, and *ad hoc* Special Experts) meetings are considered binding by the member nations and implemented through the Marine Protections Research and Sanctuaries Act (Ocean Dumping Act).

The October 1996 meeting of the London Convention was a special Conference scheduled to develop the 1996 Protocol to replace the London Convention.

Five years in the making, the revisions of the special Conference are generally more stringent on ocean disposal and polluting activities. The Protocol incorporates many new principles of environmental protection and waste management and bans ocean disposal of all wastes and other materials with a few exceptions (the *Reverse List*). The agreements reached at the special Conference will have far-reaching effects into the future of waste management in ocean waters.

The existing London Convention consists of Articles describing its philosophy, policy, and legal aspects. It also has three mandatory Annexes:

Annex 1 - substances and materials prohibited from disposal.

Annex 2 - substances disposed only with special care.

Annex 3 - provisions for establishing member nations domestic regulations.

Over time, numerous technical guidelines have been adopted to define terms and set forth assessment protocols reflecting the latest technology.

Protocol 1996 has Articles as above with two Annexes. Annex 1 will be a list of materials socially acceptable for potential ocean disposal (the *Reverse List*). Annex 2 is the Waste Assessment Framework (WAF) that technically implements the London Convention by determining suitability for disposal of the *Reverse List* (Annex 1) materials.

There will also be guidelines for implementing the Convention. The first guideline that has been adopted is the Dredged Material Assessment Framework that was initiated by

PIANC. Additional guidelines will be developed for other materials on the *Reverse List*. The Protocol must be approved by a minimum of 28 countries to come into force.

The Protocol encourages application of a *precautionary approach* to environmental protection. This means taking preventative measures when there is reason to believe that wastes and other matter introduced into the marine environment may cause harm "even when there is no conclusive evidence to prove a causal relation between inputs and their effects."

The Protocol of 1996 prohibits the ocean dumping of wastes or other matter except for dredged material and a few others. Disposal is guided by the "Precautionary Approach." The Waste Assessment Framework is implemented through guidelines for each material and allows management of otherwise unsuitable material, emphasizing source control and beneficial uses. The U.S. Army Corps of Engineers, PIANC, and the International Association of Ports and Harbors were influential in the outcome of these important revisions.

For more information about the London Convention, please contact Bob Engler, (601) 634-3624.

P.O.R.T.S. METERING SYSTEM IMPROVES NAVIGATIONAL SAFETY IN Galveston Bay

Texas decision-makers have a new intelligence-gathering ally in the effort to quickly assess and contain oil spills in the Galveston Bay system.

The new high-tech metering system's data on current speeds and directions and water levels are already helping barges and vessels to navigate more safely in Galveston Bay waters. But if a spill does occur, that same

real-time data can be key to efficiently mobilizing containment and cleanup efforts.

Other data from the Physical Oceanographic Real Time System (P.O.R.T.S), like water temperatures, salinity levels and other ecological parameters, have far-reaching uses for scientists, natural resource managers and environmentalists. Galveston Bay is the first location in the country to use this extensive monitoring system. Several other bays have similar smaller systems.

"Other coastal areas around the country are really watching us to see how this works out," according to Captain Stephen Ford, Department of Marine Transportation at Texas A&M University at Galveston (TAMUG).

During an oil spill, data supplied by P.O.R.T.S. is plugged into oil-spill simulators, which then predicts what the spill will do.

"The resulting information lets everyone know where to put their people to clean up the spill," Ford said.

P.O.R.T.S. played a major role in fighting the 5,000-barrel oil spill that occurred near Bolivar Peninsula in March. High winds and heavy currents made containing the spill very difficult, but the monitoring data helped determine landfall and guide cleanup crews.

P.O.R.T.S. consists of three Doppler metering devices, one placed in each of the three places in the bay—off Morgan's Point near the mouth of San Jacinta River, off Eagle Point near San Leon, and off the Bolivar Peninsula. The collected data are transmitted to the university. The information can be accessed by telephone or by on-line-computer.

Taking advantage of this new resource are:

- o Participants in sailboats regattas.
- o Fisherman requiring accurate information about tides.
- o Scientists involved in oyster research.
- o Mosquito Coast District officials making decisions about needed chemical quantities.

- o Regulators determining origin of pollution impacting a fishery.

- o Scientists determining how factors like water temperature, salinity and current speeds figure into a fish kill.

As of now, emerging statistics seem to indicate that P.O.R.T.S. is already improving safety for maritime traffic, especially in some key areas, like Bolivar Roads—where the Houston Ship Channel, the Intercoastal Waterway and the Texas City Ship Channel intersect. The area is difficult to navigate since currents sometimes reach speeds of 4 knots, and vessels often have to negotiate difficult turns from one waterway to the other.

The Houston Galveston Navigation Safety Advisory Committee prompted Congressional support of the P.O.R.T.S. concept. Congress authorized \$750,000 of NOAA funding for the project. That price included the equipment, installation and one year's local support to continue monitoring the program.

The investment seems to be paying off for navigators. Ford said he knows of instances where captains have called for real-time data and waited for currents to subside before proceeding through the Bolivar Road area.

Only two groundings have occurred there in the last couple of months. Previously, an average of four to five groundings per month occurred. Ford and the navigational community are waiting to see if the improvement continues over a significant period of time. Fewer groundings could mean fewer spills and greater navigational safety. That's something that would benefit all Galveston Bay users.

(Excerpted from an article in May-June 1996 *Gulfwatch*.)

FORMER PIANC PRESIDENT WINS ASCE's PARCEL-SVERDRUP AWARD

The John I. Parcel-Leif J. Sverdrup Civil Engineering Management Award is given to a member of the American Association of Civil Engineers (ASCE) who has made a definite contribution in the form of written presentations or notable performance to the field of civil engineering management.

Major General Stanley G. Genega, U.S.A. (Ret.) wins this year's award for outstanding engineering management in:

- o Streamlining U.S. Army Corps of Engineers' product delivery.
- o Instituting and gaining support for performance measurement.
- o Directing timely, effective responses to unprecedented natural disasters.
- o Maintaining an infrastructure and environmental program vital to the nation's well-being in the face of fiscal pressure.

Prior to his retirement last year, MG Genega was the Director of Civil Works for the Corps of Engineers, where he directed the federal government's largest water resources development and management agency, overseeing an annual budget of over \$3.5 billion. Also the former President of the U.S. Section, PIANC, MG Genega holds degrees from the U.S. Military Academy and Sloan School of Management at the Massachusetts Institute of Technology.

NATIONAL NETWORK FOR MARINAS SHARES INFORMATION

Sea Grant has established a national network for marinas and marine-related trades. The network, named MarinaNet, creates a system to transfer information and experience

about marina operations efficiently among academia, the marina industry, regulatory agencies and other marine-related organizations.

The objective of network is to encourage information sharing through its biannual newsletter, *MarinaNet News*, and an Internet-based discussion group. Eventually, MarinaNet will have a web site on the Internet, featuring databases and bibliographies that focus on marine trades.

NAVIGATION INFO NOW ON INTERNET

Like a proud papa, Monte Hines' eyes light up and his voice grows animated when he describes the Navigation Information Connection (NIC). NIC is the new wonder child of the navigation industry, and Hines is one of its "parents."

NIC helps river pilots gain easy access to information on the U.S. inland waterway systems. It helps barge companies keep track of river traffic and assists them as they monitor navigation business needs. And it allows Corps offices to share inland river data.

NIC, a World Wide Web Internet home page, provides a wide selection of information concerning inland river navigation. It makes it easier to locate available data through links or connections. NIC is free to anyone with an Internet connection.

"In 1994, I asked to participate on a lock operating team, similar to what we know here in Rock Island District as a process action team," said Hines, acting chief of Mississippi River Project Office. "Ohio River Division (ORD) joined with private industry to sponsor this brainstorm session. We all came away with a common commitment to develop an information clearing house to better serve the navigation industry."

That original meeting included representatives from the Rock Island, St. Louis,

Nashville, and Huntington Districts, ORD, and the private firms of Ingram Barge Lines, Western Kentucky Navigation, and American Commercial Barge Lines.

"One of the main goals at the 1994 get-together was to work on ORD's 'navigation notices,'" Hines said. "North Central Division had experience with Navigation Notice Number One, which consolidated all the notices and rules for the industry. The idea of exchanging information and having one place to go and get it appealed to the industry representatives who were there."

The group realized that Corps offices and navigation companies all possessed a great deal of information, but the information was isolated and not easily shared.

Hines got the task of exploring a merger of information. He came back to Rock Island District and began working with Tom Lisco and Lee Swanson (now retired) of the Information Management Office. Together they researched ways to electronically link existing data. They briefly investigated a bulletin board system, but the Internet emerged as best forum.

Rock Island District obtained an Internet server to accommodate the large body of existing information. In March 1995, NIC's "birth announcement" was an Internet home page residing on Rock Island District's server. Many pieces of information that were spread throughout the industry could now be retrieved from one location.

Navigation notices, blue book data, and OMNI (Operations and Maintenance Navigation Information) data were part of the first NIC home page. OMNI is a data collection system developed by the district to collect lock performance and other hydrologic data, and has been in place almost 20 years. OMNI provides a real-time data, such as vessel queues.

Over time, incremental improvements have been added. Suggestions from users have expanded NIC to hundreds of informa-

tion links. NIC has links to national weather conditions; visual maps, charts, and photos; library and reference information; newspapers, periodicals, and publications on navigation; and Internet search tools. Information is provided by the Corps, the Coast Guard, federal, state, and local agencies, industry, colleges and universities, and others.

Hines now includes a "Recent Additions and Updates" at the top of the home page. Users can find out by date what's new in NIC. Hines answers questions and implements many suggestions from messages he receives.

Now about 18 months old, NIC is growing and maturing into a popular youngster in the world of inland waterway navigation. To access NIC, the Internet address is <http://www.ncr.usace.Army.mil/nic.htm>

ST. LOUIS DISTRICT AUTOMATES LOCKS



Jesse Sanders

When Major General Robert B. Flowers, Commander, Lower Mississippi Valley Division of the Corps of Engineers, visited the St. Louis District on 11 December 1996, District personnel briefed him on the status of lock automation in the St. Louis District. They also presented their plan to remotely operate a lock and dam.

As part of the presentation, the auxiliary lock at Mel Price Lock and Dam was remotely run through a complete operating cycle from the St. Louis District office. (Mel Price is a completely computerized facility operated by

a semi-automatic control system.) This was the first time a lock was remotely operated in the United States.

For the demonstration, computer and video links to the locks were established. This permitted operation as well as visual and graphic feedback of the status of lock machinery during the demonstration. Constant communication with the onsite operator was maintained to assure safe operation during the demonstration. Sensitive to the potential concerns of labor over this issue, the St. Louis District proactively coordinated the demonstration with union officials. The union agreed to partner in the demonstration and participate in future studies of the concept.

The presentation focused on the potential for reduction in operating budgets as a result of the application of computer, surveillance and monitoring technologies at U.S. Army Corps of Engineers' locks and dams. The logical first application of this technology, where potentially significant savings in dollars and benefits to the towing industry would be realized, is at low-volume locks. There are more than 100 low-volume locks in the country where this concept could be applied.

The St. Louis District is requesting authority and funding to proceed with a study to remotely operate such a lock—the Kaskaskia Lock and Dam, located on the Kaskaskia River. Pending funding and authority, a system to control Kaskaskia Lock and Dam, from Lock 27, located on the Mississippi River, could be operational in 2-3 years.

The St. Louis District's vision of future navigation on the inland waterways is one of control centers from which the Corps and industry would partner to achieve modern river management. It is a vision of one Corps operator controlling a series of locks while industry participates in a coordinated traffic control system and expert computer systems control pool levels between locks.

While significant operational and safety concerns remain to be addressed before this

vision can be realized, a more cost-effective method of operation can be achieved through the use of modern, off-the-shelf technology. The St. Louis District's goal is to maintain operation 24 hours per day, seven days a week, while significantly reducing operating costs.

For additional information, please contact Anson Eickhorst, Executive Assistant to the District Engineer, St. Louis District, at (314) 331-8016.



PROPOSAL FOR PIANC COMMITTEE ON LOCK AUTOMATION AND REMOTE CONTROL

Anson Eickhorst, Principal U.S. Representative to PTCI introduced the subject for the following new working group.

Significant potential exists to realize worldwide benefits to navigation through the increased application of computer technologies to locks and dams. Significant savings in operating costs are possible through automation and remote operation of navigation structures. Savings would be manifested through increased operational efficiencies and reduction in operating personnel.

It is proposed that a committee be established to identify the current state-of-the-art in the application of computer technologies to locks and dams and further to identify opportunities for automation and remote control of facilities. Topics to be discussed would include:

- a. Identification and solutions for operational and safety concerns.
- b. Computerized control systems.
- c. Instrumentation systems.
- d. Voice, data and video transmission techniques.
- e. Security concerns and solutions.
- f. Labor concerns and solutions.

P.O.C. Anson Eickhorst, PTCI, (314)
331-8016

BRINGING THE PORT OF NEW YORK AND NEW JERSEY INTO THE 21ST CENTURY

The Port of New York and New Jersey is at a decisive point. The region is poised to make the difficult choices necessary to bring the Port into the 21st century.

In October 1996, the Corps of Engineers released the Dredged Material Management Plan (DMMP) Interim Report laying out a menu of 53 possible alternatives for the disposal of the Port's dredged material. The regional stakeholders must now closely evaluate each of these alternatives and identify those which are locally supportable. These decisions will steer the future direction of the study, with the Final Report scheduled for completion in September 1998.

The Port facilities presently support the docking of more than 4,100 ocean going vessels annually. To accommodate the next generation of cargo ships, the channels require a depth of 40 feet to 50 feet. Failing to improve the shipping access would endanger \$29 billion in economic activity and 190,000 jobs.

To facilitate the decisions for the stakeholders here, the Port Authority of New York and New Jersey and the States of New York and New Jersey, and the Corps of Engineers hosted several public information sessions within the port to educate the public on the

options presented. We organized the sessions as "poster" sessions, which presented graphically and in non-engineering terms the mechanics of each disposal option identified in the report. Technical experts on subjects such as containment islands and borrow pits were available to answer questions and explain the information.

The flurry of press activity before the meetings helped to boost attendance at the sessions. Many residents expressed strong concerns over the disposal methods portrayed in the Corps Interim Report at the session. Opposition to alternatives was regionally segregated. In general, the "not in my backyard" sentiment prevailed. At the Staten Island and New Jersey shore sessions, the greatest opposition was to the use of containment islands. In Brooklyn, the opposition was against the use of subaqueous pits, and in northern New Jersey, the opposition was to upland disposal.

Sensationalized news articles referred to the Corps' base plan, or most economical plan, as the "Toxic Mud Island." This fostered a misunderstanding that the Corps of Engineers had decided to pursue containment islands.

In fact, the Corps of Engineers does not have the resources to perform detailed investigations on all 53 options. Only through regional input from the stakeholders can we narrow the field of feasible disposal options to explore. Containment islands are on the list of potential solutions. The choice is a regional one.

On a positive note, the sessions did generate universal support for decontamination technologies for the treatment of dredged material. This technology, however, is still undergoing pilot scale testing and remains the most costly (up to a \$100/CY) for dredged material. While some have claimed that decontamination is not "Star Wars" technology, the present processing methods are expensive. Over time, as research continues, the costs of

decontamination technologies should drop significantly, but this is not presently the case.

To ensure a prosperous future of the Port and the estuary, the decisions for dredged material disposal will have to be made today. District Engineer, COL Gary Thomas summarizes, "Regional decision-makers must now make the tough choices and weigh the options, the pros and the cons, and determine what's achievable and what is not achievable. It is time to decide how to protect the health of this estuary and the health of this port."

For more information, please contact Randall G. Hintz, U.S. Army Corps of Engineers, New York District, at (212) 264-4260.

(Note: The posters referred to in this article may be viewed online at the District's web site: <http://www.nan.usace.army.mil>)

NORTHEAST REGIONAL RISK ASSESSMENT TEAM UNVEILS REPORT

After more than six months of in-depth analysis, the Regional Risk Assessment Team for the Northeastern states unveiled its report during a March 7 meeting in Washington D.C. with U.S. Coast Guard Rear Admiral James C. Card, Assistant Commandant, Marine Safety and Environmental Protection.

"On behalf of the United States Coast Guard and the citizens of each of the Northeastern states, I want to commend this team for its efforts to make our waterways safer, and to move us closer to the day when the threat of oil spills is eliminated once and for all," said RADM Card. He added that the Coast Guard will work quickly to incorporate the report's findings into new regulations. "We are pledged to take full advantage of the work that this team has done by moving forward with a draft rulemaking," he said.

The Regional Risk Assessment Team, which was organized last June in response to

concerns about the need for enhanced regional safety measures following the *North Cape* oil spill off Rhode Island, includes CPT Eric Williams, U.S. Coast Guard, first District, who has served as the group's chairman. Other members include Linda O'Leary, AWO President - Atlantic Region; John Torgan of Rhode Island's Save the Bay; and Stephen Morin of the Rhode Island Department of Environmental Management.

RADM Card also accepted the Regional Risk Assessment Team's report on behalf of the National Quality Steering Committee of the Coast Guard-AWO Safety Partnership, a cooperative effort launched in 1995 by leaders from the Coast Guard and the tugboat, towboat and barge industry.

AWO President Tom Allegretti, who co-chairs the Coast Guard-AWO Safety Partnership Quality Steering Committee, also received a copy of the report. Mr. Allegretti also endorsed the Regional Risk Assessment Team's cooperative efforts to enhance safety. "This report takes the safety partnership concept to a new level. We've now proven that this process can work with a large, diverse group of participants on a project that emerged from a crisis situation—the *North Cape* spill," said Mr. Allegretti. "The quality and breadth of this report offers compelling evidence that cooperation holds the key to improving marine safety."

CPT Williams described the report, which is titled "Regional Risk Assessment of Petroleum Transportation in the Territorial Waters of the Northeastern United States," as a prime example of how groups with diverse backgrounds can work together to improve marine safety throughout the Northeast. "This analysis represents the best efforts of the Coast Guard, state governments, the environmental community and the tug and barge industry to jointly determine what practical steps can be taken to help prevent a scenario like the *North Cape* spill from ever happening again," he said.

Ms. O'Leary credited the successful production of the report to the team's willingness to work together. "The reason we're where we are today is that we had a mutual respect which enabled us to work toward consensus solutions," she said. "This was not a one-shot process. Everyone worked very hard and very creatively to get the job done."

Highlights of the Regional Risk Assessment report include recommendations that call for:

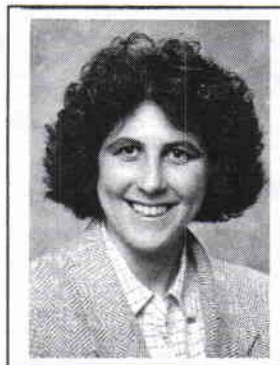
- All barges, whether manned or unmanned, to employ operable anchoring systems and an emergency barge retrieval device with pickup capability on the tugboat. These systems should adhere to the specifications called for in finding recently released by the congressionally authorized Towing Safety Advisory Committee;
- All marine transportation companies operating in the Northeastern states to prepare comprehensive voyage plans, which include specific information related to weather, vessel equipment, and communication and navigation requirements for each transit of a barge and towing vessel unit;
- All marine transportation companies operating in the waters of the Northeast to improve their communications capabilities by establishing and maintaining contact with other vessels in the same geographic areas by transmitting over VHF channels 13 and/or 16; and,
- All tugboats towing barges loaded with 25,000 barrels or more of petroleum to employ two engines and two propellers forming a "twin screw" propulsion system to add an alternate source of power in case of engine trouble. Any tugboat

with a single engine/propeller system that is moving a loaded barge of 25,000-barrel capacity or greater must employ and escort/assist tug that has sufficient horsepower to effectively render assistance throughout the voyage if the primary towing vessel loses power or steering while navigating in the waters of the Northeastern states.

First District Coast Guard officers are currently preparing a draft rulemaking based on the report's recommendations. Submission of the draft rule to Coast Guard headquarters is expected early next month as the first step in the regulatory process. For a copy of the report, please contact Linda O'Leary at (212) 406-1884.

(Reprinted from the March 1997 **American Waterways Operators Letter**.)

IN MEMORIAM



Michelle Thevenot, 31, passed away on 21 December 1966 after a lengthy battle with cancer.

Since 1986, Michelle had worked as a research hydraulic engineer with the U.S. Army Engineer Waterways Experiment Station (WES) Coastal and Hydraulics Laboratory (CHL). Exceptionally talented and with a most promising future in her chosen profession, she recently received the Gustave Willems Award from the U.S. Section, PIANC, for an outstanding technical paper. A candidate for the degree of Doctor of Philosophy in Civil Engineering from Louisiana State University, Michelle would have

received her degree in May 1997. She will be sadly missed by her friends and co-workers at WES and by her professional acquaintances everywhere.

Funeral services were held in New Orleans, Louisiana, and a memorial mass was held in Vicksburg, Mississippi. Michelle is survived by her husband, Robert, and a 4-year-old son, Zachary.

PUBLICATIONS

Technical Investigation of Wake Wash from Fast Ferries

This book investigates the consequences of wake wash in coastal and shallow water regions from fast ferries on the safety of small vessels and ships in Danish waters, including the risk to which swimmers and other users of coasts and beaches are exposed.

An English language summary with conclusions may be obtained by FAX: +45 76 25 67 or writing to:

Danish Hydraulic Institute
Danish Maritime Authority
Agern Alle 5
DK-2970 Horsholm, Denmark

A Guide for Multiple Use Waterway Management - Creating Safer Waterways

This guide was prepared for the National Water Safety Congress by Urban Research and Development Corporation and produced under a grant from the Aquatic Resources Trust Fund administered by the U.S. Coast Guard. A useful tool for multiple use waterway planning and management at all levels, it stresses the importance of comprehensive and systematic waterways research and analysis and presents a basic waterway management planning process for easy use or modification based upon your situation. It also offers helpful guidelines to consider when preparing ef-

fective, balanced, multiple-use waterway management plans.

For more information or to obtain a copy for \$12.95, or \$10.00 for non-profit organizations or government agencies, please contact Pete O'Connell, project manager, 8003 Broadlawn Drive, Pittsburgh, PA 15237.

Port Security: A National Planning Guide

The Maritime Administration (MarAd) recently produced this manual in conjunction with the U.S. Coast Guard. It reviews the essential aspects of port security and identifies the challenges facing U.S. ports. Designed to serve as the basis for establishing security standards, the manual may be obtained by calling MarAd at (202) 366-5507 or Faxing at (202) 366-8886.

1998 INTERNATIONAL BULLETINS

1st Issue - Bulletin No. 97 (January 1998)

Articles on the SPN theme of "Interaction between Recreational Navigation and Natural Environment" are due to U.S. Section by June 1, 1997.

2nd Issue - Bulletin No. 98 (March 1998)

Articles on the PTCI theme of "Barrage on Estuaries" or "Technical and economic questions raised by high-speed vessels" are due to the U. S. Section by August 29, 1997.

CALL FOR PAPERS

Mark your calendars! The International Workshop on Dredged Material Beneficial Uses will be held at the Omni Inner Harbor Hotel in Baltimore, Maryland, from 28 July to 1 August 1997.

While the U.S. Army Corps of Engineers will be hosting this workshop, other cooperat-

ing sponsors will include the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, NOAA National Marine Fisheries Service, USDA Natural Conservation Resources Service, and the Maryland Port Administration. In addition to the traditional beneficial uses of dredged material, the workshop will present other field-tested uses such as landfill cover, strip-mine reclamation, subaqueous capping, and manufactured soil products.

Abstracts not to exceed 500 words should be sent by e-mail to Dr. Mary Landin at landinm@ex1.wes.army.mil, by 1 May 1997. For more information or to register, please call Dr. Landin at (601) 634-2942 or FAX: (601) 634-4016.

**NOTE:
INFORMATION
CONCERNING INDIVIDUAL
PAPERS FOR THE 29TH CON-
GRESS**

The original instructions have been changed. An abstract of three pages (3,150 words) should be submitted to reach Brussels on or before January 1, 1998. The Editing Committee will select the contributions to be presented at the Congress and notify authors. The Editing Committee will provide information about preparing papers to the selected authors. The final articles will not be distributed before the Congress. A condition of selection is that the authors agree to introduce their papers personally to the Congress.

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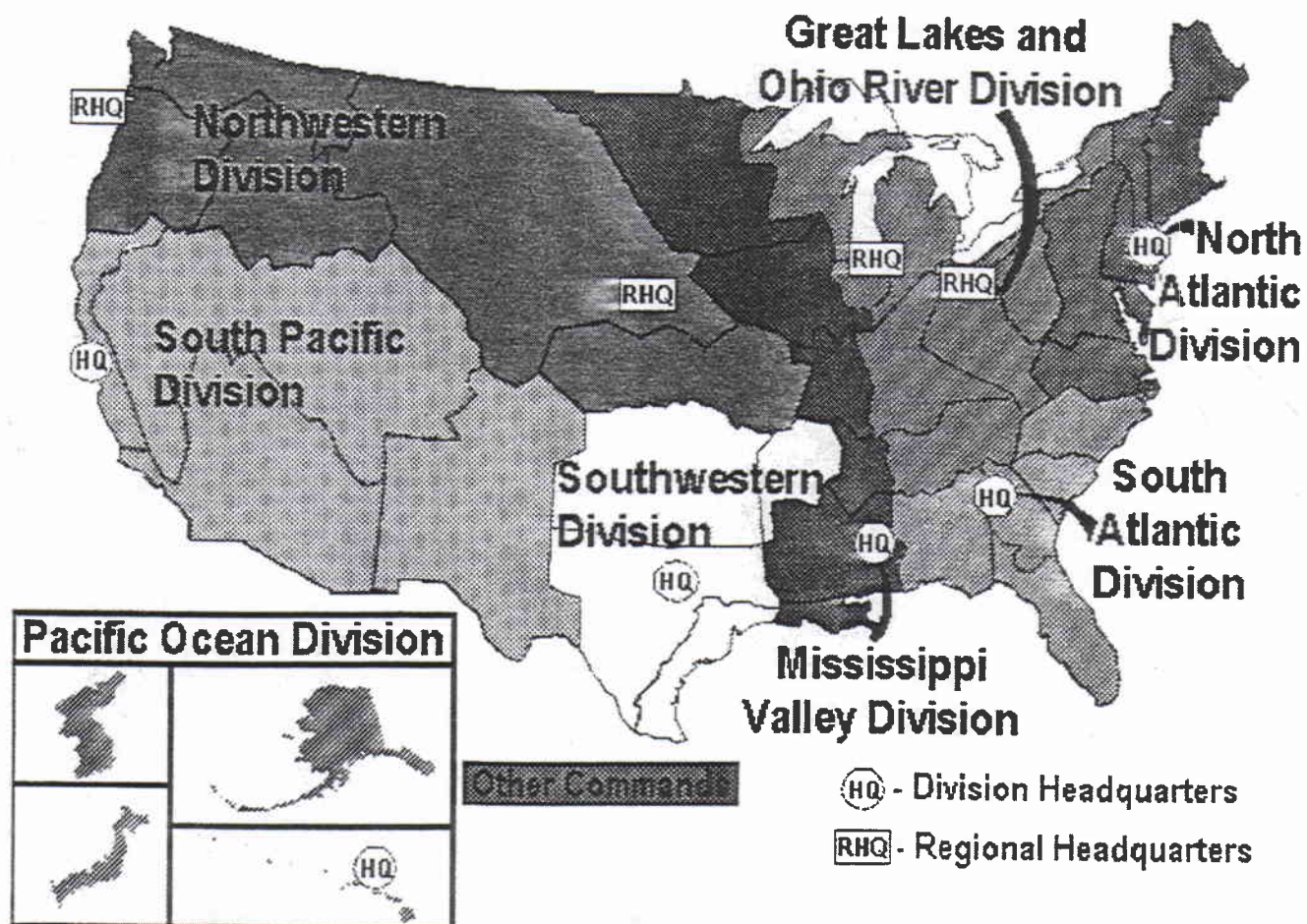
28-30 Oct 1997	U.S. Section, PIANC Annual Conference POC: Mary Jane Robertson (703) 428-6286	Wilmington, NC
8-11 Mar 1988	Ports '98 Mike Kraman POC: (800) 548-2723	Long Beach, CA
6-11 Sep 1998	29th International Congress PIANC POC: Mary Jane Robertson (703) 428-6286	The Hague, The Netherlands

OUTSIDE PIANC

20-24 May 1997	Society of American Military Engineers - Annual National Conference POCs: COL Keith Smith/Ms. Tracey Knott TEL: (703) 695-2550/(703) 641-4600	Washington, DC
9-10 Jun 1997	International Port Development POC: Ken Hyers TEL: (800) 817-8601 FAX: (617) 270-6216	Washington, D.C.
10-13 Jun 1997	Nor-Shipping '97 POC: Arne Fuglum TEL: 47-6684-9434	Oslo, Norway
22-25 Jun 1997	26th International Conference on Coastal Engineering Tel: +45 76 95 55 FAX: +45 76 25 67	Denmark
28 Jun-3 Jul 1997	WEDA XVIII Western Dredging Association Annual Meeting and Technical Conference "Dredging: The International Business" POC: Robert E. Randall TEL: (409) 845-4568	Charleston, SC
29 Jun-3 Jul 1997	AWRA (American Water Resources Association) and UCOWR (Universities Council on Water Resources) Annual Symposium "Water Resources, Education, Training, and Practice: Opportunities for the Next Century" AWRA: (703) 904-1225 UCOWR: (618) 536-7571	Keystone Resort, CO

16-18 Jul 1997	Transportation Research Board Summer Meeting POC: Joedy Cambridge TEL: 202-334-2167	Gulfport, MS
20-26 Jul 1997	Coastal Zone '97 "Charting the Future of Coastal Zone Management" POC: Chantal Lefebvre Urban Harbors Institute University of Massachusetts, Boston TEL: (617) 287-5576 FAX: (617) 287-5575 Lefebvre@umb.sky.cc.umb.edu	Boston, MS
6-8 Aug 1997	Pacific Congress '97 POC: PACON International P.O. Box 11568 Honolulu, Hawaii 96828 TEL: (808) 956-6163 FAX: (808) 956-2580	Hong Kong
7-11 Sep 1997	New Zealand Coastal Society International Multi-Disciplinary Conference "Pacific Coasts and Ports '97"	Christchurch, New Zealand
7-11 Sep 1997	International Conference on Contaminated Sediments POC: PIANC International FAX: 3222085216	Rotterdam, The Netherlands
17-19 Sep 1997	National Waterways Conference Annual Meeting POC: Harry Cook TEL: 202-296-4415	Houston, TX
7 Oct 1997	Conference Theme: The Use of Geotextiles and Geomembranes in River and Maritime Works. This one-day conference sponsored by PIANC will be held in conjunction with the following conference. POC: E-mail: navigation-aipcn-pianc@ tornado.be	Reims, France
8-9 Oct 1997	Conference Theme: Rencontres '97 - Geotextiles and Geomembranes. Sponsored by Comite Francaise des Geosynthetiques. POC: E-mail: navigation-aipcn-pianc@tornado.be. Fax 322-208-5215	Reims, France.
15-17 Feb 1999	ICOMIA Third International Marina Conference POC: Ron Stone, IBFC, Chairman c/o NMMA Washington, Harbour 3050 K Street, NW, Suite 145 Washington, D.C. 20007 TEL: (202) 944-4985 FAX: (202) 944-4988	Ft. Lauderdale, FL

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